IN THE DRAWINGS

The drawings have been objected to because they are handwritten, and therefore, considered informal. In response, Applicant submits herewith replacement drawings in compliance with 37 CFR 1.121(d). Approval of the replacement drawings is respectfully requested.

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REMARKS

Claims 1-2, 5-11, 14-22, and 25-30 remain in this application. Claim 1 has been amended to include, in the alternative, the limitations of claims 3 and 4. Claims 10, 19 and 30 have been amended in a similar manner. Claims 3-4, 12-13, 23-24, and 31-32 have been cancelled. All the claims remaining in this case have been rejected under 35 USC § 102(e) as allegedly being anticipated by Luick (US Pub. 2003/0229662). Applicant respectfully traverses this rejection.

Applicant discloses a novel and unobvious method for determining the process speed and temperature of a chip. In one embodiment described by Applicant, the process speed and temperature are determined with two ring oscillators. A first counter driven by the first ring oscillator is compared to a reference counter, and the results used to compute the frequency of the first ring oscillator. A second counter driven by the second ring oscillator is also compared to the reference counter, and the results used to compute the frequency of the second ring oscillator. Applicant then describes a process by which the process speed and the temperature of the chip can be determining from the frequency computations for the two ring oscillators.

Luick has nothing to do with computing the process speed and temperature of a chip. Instead, Luick discloses a process for eliminating hot spots on processor chips in a symmetric multiprocessor computer system. Although Luick uses multiple ring oscillators to identify the hot spots, the ring oscillators are never used to compute the process speed or temperature of system. Instead, the frequency of each ring oscillator is compared to the frequency of a reference ring oscillator to determine the frequency differential, which is related to the difference in temperature between the ring oscillator and the reference ring oscillator. If the frequency differential for a ring oscillator on a processor exceeds a threshold value, tasks being performed on that processor are moved to a different processor. Clearly, Applicant discloses and novel and unobvious method over Luick.

Referring now to the specific claims, Applicant submits that they recite subject matter which is neither disclosed or suggested by Luick. In particular, independent claims 1, 10, 19 and

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30 each require the calculation of either the "process speed or temperature of the chip." Luick, on the other hand, computes the frequency differential between two ring oscillators and uses this information to locate hot spots based on the principle that the frequency of ring oscillators increase with temperature. However, Luick does not teach or suggest computing the actual temperature of the chip.

The Examiner argues that the reference ring oscillator disclosed in Luick also teaches the process of computing the process speed of the chip. However, the Examiner fails to point out wherein Luick does he explain how to compute the process speed of the chip from the reference ring oscillator. This is because the method of computing the process speed of a chip from the frequency of multiple ring oscillators was not known before Applicant's invention. Indeed, Applicant believes that he was the first to recognize the relationships between temperature, process speed, and ring oscillator frequency that enables the various inventive concepts described throughout the pending patent application. These relationships are not disclosed nor suggested in Luick.

The dependent claims in this case incorporate by reference the requirement to calculate either the "process speed or temperature of the chip." Accordingly, these claims are also patentable for the same reasons set forth hereinbefore, as well as the additional limitations recited therein.
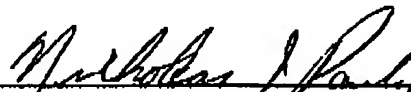
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REQUEST FOR ALLOWANCE

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested. Should any issues remain unsolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 9/15/2005

By: _____
Nicholas J. Pauley, Reg. No. 44,999
858-845-8405

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 651-4125
Facsimile: (858) 658-2502

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